Remarks

Claims 1-15 are currently pending in this application. Claims 1-5, 7-13 and 14 were rejected under 35 USC §102(b) as being anticipated by either Ziegler, Jr. et al. (U.S. Patent No. 3,678,447) or Hayes et al. (U.S. Patent No. 4,810,208). Claim 6 was rejected under 35 USC §103(a) as being unpatentable over Ziegler, Jr. et al. in view of Craft, Jr. (U.S. Patent No. 6,238,236). New claim 15 has been added.

The specification was objected to because the title of the invention was not descriptive. The title of the invention has been amended. Applicants request that this objection be withdrawn.

The drawings were objected to because they must show every feature of the invention specified in the claims. Applicants submit that a definition of "ratchet" as found in Webster's Ninth New Collegiate Dictionary is "to raise to progressively higher levels." This feature is shown in the drawings in Figs. 1 and 3-5. Applicants respectfully request that this objection be withdrawn.

Claims 1, 2, 11, 13 and 14 have been amended to include the additional limitation that the fastening mechanism or the means for maintaining a consistent pressure on the compliant material can be adjusted in incremental pre-set positions. These amendments are made in the interest of speedy prosecution of this application and without prejudice to applicants' right to prosecute claims of broader or different scope in a continuing application.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached pages are captioned **"Version With Markings To Show Changes Made."**

The present invention is directed to an electrical connector having a housing and cap. The connector is adjustable for accommodating variations in size and tolerance of a sealing member, particularly a gel sealing member, compressed within the connector. The adjustment is made via a latching mechanism, including latching ridges and teeth formed in the side walls of the housing and cap. Together, the latching teeth and ridges form incremental pre-set positions for adjusting the pressure on the sealing member.

Ziegler, Jr. et al. is directed to a coaxial cable connector subassembly including screw threads 10, 96 which engage each other for connecting two portions together. Annular skirt

88 permits ready insertion of the contact 86 in the dielectric plug 80, but acts as an annular barb to prevent removal of the contact from the plug 80. (See column 3, lines 24-29.) As the skirt engages plug 80, there is an optimal position for engagement between the connector portions, with no adjustment possible for applying force on the compliant material. There is no disclosure or suggestion of providing adjustments in incremental pre-set positions, as is now recited in each of the independent claims.

With regard to claim 7, the claims recite a latch comprising a tooth and groove in which the tooth engages the groove. Ziegler, Jr. et al. discloses screw threads 10, 96. A latch generally consists of a bar which engages a notch. It is respectfully submitted that screw threads do not constitute a latch comprising a tooth and groove in which the tooth engages the groove. Thus, claim 7 is allowable because it depends from an allowable base claim and because the prior art does not disclose or suggest the features recited in the claim.

Hayes et al. also does not anticipate the presently claimed invention. Hayes et al. is directed to a connector in which the seal is retractable in order to expose the extended portions of the terminals for probing. Latching protrusions 34 of Hayes et al. engage latching surfaces 110; however, there is no disclosure or suggestion of a fastening mechanism which is adjustable, particularly, one that can be adjusted in incremental pre-set positions, as is now recited in all of the pending claims. Thus, independent claims 1, 2, 11, 13 and 14, as well as all dependent claims, are allowable.

The remaining prior art of record, including Craft, Jr., does not disclose or suggest the present invention, as is now claimed. Craft, Jr. is directed to a stress relief apparatus for an electrical conductor. One of ordinary skill in the art would not combine Craft, Jr. with Ziegler, Jr. et al. As discussed above, Ziegler, Jr. et al. is directed to a coaxial cable connector in which two connecting portions are screwed together and include a gripping member to prevent removal of a contact. There is no motivation in either Ziegler, Jr. et al. or Craft, Jr. to modify the Ziegler, Jr. et al. device as suggested in the rejection. A primary objective of Ziegler, Jr. et al., the gripping members preventing removal of the contact, would be circumvented if modified by the teachings of Craft, Jr. Thus, it is improper hindsight to modify the Ziegler, Jr. et al. device with the teachings of Craft, Jr.

Applicants believe all claims pending in this application are allowable in view of the cited art of record.

Information Disclosure Statement

In fulfilling the duty of candor and good faith, the following documents are hereby disclosed to the Patent Office in accordance with 37 CFR 1.56. It is not admitted that the information in the listed documents is material to patentability as defined in 37 CFR § 1.56(b). The Examiner is requested to consider the documents in the examination of this application.

Accompanying this statement is a Form PTO-1449 in duplicate on which the documents are listed. The Examiner is requested to return an initialed and signed copy of the form once the documents have been considered.

Accompanying this statement is a Form PTO-1449 in duplicate on which the documents are listed. The Examiner is requested to return an initialled and signed copy of the form once the documents have been considered.

The following documents were cited in the specification.

U.S. Patent No. 4,600,261 issued to Debbaut on July 15, 1986;
U.S. Patent No. 4,690,831 issued to Uken et al. on September 1, 1987;
U.S. Patent No. 4,716,183 issued to Gamarra et al. on December 29, 1987;
U.S. Patent No. 4,777,063 issued to Dubrow et al. on October 11, 1988;
U.S. Patent No. 4,852,646 issued to Dittmer et al. on August 1, 1989;
U.S. Patent No. 4,864,725 issued to Debbaut on September 12, 1989;
U.S. Patent No. 4,865,905 issued to Uken on September 12, 1989;
U.S. Patent No. 5,529,508 issued to Chiotis et al. on June 25, 1996;
U.S. Patent No. 5,588,856 issued to Collins et al. on December 31, 1996;
U.S. Patent No. 5,934,922 issued to Chiotis on August 10, 1999;
European published patent application No. 204,427 (Raychem Corporation), published December 10, 1986;
International published patent application No. WO 86/01634 (Raychem Corporation), published on March 13, 1986;
International published patent application No. WO 88/00603 (Raychem Limited), published on January 28, 1988;
U.S. Patent application Serial No. 317,703 filed on March 1, 1989, the subject matter of which is incorporated in continuation-in-part application Serial No. 07/488,806, now U.S. Patent No. 5,079,300 issued to Dubrow on January 7, 1992; and

U.S. Patent application Serial No. 485,686 filed on February 27, 1990.

The following document was cited and applied by the Examiner in the Official Action dated July 26, 2002, but was not included on the Form PTO-892.

U.S. Patent No. 6,238,236 issued to Craft, Jr. on May 29, 2001.

The following document is also being disclosed.

U.S. Patent No. 4,875,870 issued to Hardy et al on October 24, 1989.

The Commissioner is authorized to charge the fee ($180) for submission of this Information Disclosure Statement to Deposit Account 18-0560.

CONCLUSION

In view of the foregoing, applicants believe all claims pending in this application are now in condition for allowance. If it is believed that a telephone conference would expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (650) 361-2483.

Respectfully submitted,

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Version With Markings To Show Changes Made

In the Specification:

Paragraph 0033 has been replaced with the following.

[0033] Additionally, the gel sealant 36 is preferably a liquid-extended polymer network. The polymeric component can be for example, a silicone, polyorgano siloxane, polyurethane, polyurea, styrene-butadiene and/or styreneisoprene block copolymers. The gel sealant 36 may also be formed from a mixture of such polymers. The gel sealant 36 may alternately comprise a foam or fabric impregnated with the gel. Examples of preferred sealant gels can be found in U.S. Pat. Nos. 4,600,261, 4,716,183, 4,777,063, 4,864,725, and 4,865,905, European published patent application No. 204,427, International published patent applications Nos. WO 86/01634, and WO 88/00603, and commonly assigned ~~copending~~ U.S. Patent applications Ser. Nos. 317,703 filed Mar. 1, ~~1990~~ 1989, abandoned in favor of continuation-in-part application Ser. No. 07/488,806, filed Mar. 5, 1990, now U.S. Pat. No. 5,079,300, and 485,686 filed Feb. 27, 1990, now abandoned. Gel impregnated in a matrix is disclosed in U.S. Pat. Nos. 4,690,831 and 4,865,905. The details of each of the foregoing references are hereby incorporated by reference into the present application.

In the Claims:

Claims 1, 2, 11, 13 and 14 have been amended as follows.

1. (Amended) A sealable connector, comprising:

a first connector portion;

a second connector portion adapted to engage the first connector portion;

a compliant material disposed between the first and second connector portions; and

a fastening mechanism that secures the first connector portion to the second connector portion, such that a force applied upon the compliant material by the respective first and second connector portions can be adjusted in incremental pre-set positions.

2. (Amended) A sealable connector, comprising:

a first connector portion;

a second connector portion adapted to engage the first connector portion;

a compliant material disposed between the first and second connector portions; and

an adjustable fastening mechanism that secures the first connector portion to the second connector portion, the fastening mechanism including means for adjusting a force in incremental pre-set positions applied upon the compliant material by the respective first and second connector portions.

11. (Amended) A sealable connector, comprising:

a cup shaped body defining a cavity, the body having a bottom surface;

a cap adapted to engage the body cavity;

an aperture in the cap, the aperture adapted to receive a contact terminal;

a compliant material disposed between the body and the cap; and

a fastening mechanism that secures the body to the cap, such that a force applied upon the compliant material by the body and the cap can be adjusted in incremental pre-set positions.

13. (Amended) A sealable connector, comprising:

a cup shaped body defining a cavity, the body having a bottom surface;

a cap adapted to engage the body cavity, the cap including an aperture;

a contact terminal adapted to extend from the body bottom surface, the contact terminal adapted to align with, and pass through, the aperture;

a compliant material disposed between the body and the cap; and

means for maintaining a consistent pressure on the compliant material and for adjusting the pressure in incremental pre-set positions, such that the compliant material maintains a substantial seal between the cap and the body.

14. (Amended) A sealable connector, comprising:

a cup shaped body defining a cavity, the body having a bottom surface;

a cap adapted to engage the body cavity;

a plurality of apertures in the cap, the apertures adapted to receive a plurality of contact terminals;

a compliant material disposed between the body and the cap; and

a fastening mechanism that secures the body to the cap such that a force applied upon the compliant material by the body and the cap can be adjusted in incremental pre-set positions.

New claim 15 has been added as follows.

--15. A sealable connector, comprising:

a first connector portion;

a second connector portion adapted to engage the first connector portion;

a compliant material disposed between the first and second connector portions; and

an adjustable fastening mechanism that secures the first connector portion to the second connector portion and exerts a force on the compliant material, the fastening mechanism including means for adjusting the force in incremental pre-set positions.--